

## Skimming

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**Objective:** To recover floating oil from the water surface using mechanized equipment. This includes specifically designed pollution equipment called skimmers, and other mechanical equipment such as draglines and dredges.

**Description:** There are numerous types of skimming devices, described in the annually published World Catalog of Oil Spill Response Products (Schulze 1998): weir, centrifugal, submersion plane, and oleophilic. They are placed at the oil/water interface to recover, or skim, oil from the water's surface and may be operated independently from shore, be mounted on vessels, or be completely self-propelled. Because large amounts of water are often simultaneously collected (incidental to skimmer operation) and treated, efficient operations require that floating oil be concentrated at the skimmer head, usually using booms. Adequate storage of recovered oil/water mixtures must be available, as must suitable transfer capability. Skimmers are often placed where oil naturally accumulates in pockets, pools, or eddies.

**Applicable Habitat Types:** Can be used on all water environments (weather and visibility permitting). Waves, currents, debris, seaweed, kelp, ice, and viscous oils will reduce skimmer efficiency.

**When to Use:** When sufficient amounts of floating oil can be accessed. Skimming spilled gasoline is usually not feasible because of fire, explosion, and inhalation hazards to responders. However, when public health is at risk, gasoline can be skimmed if foam is applied and extreme safety procedures used.

## Skimming (cont.)

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- Biological Constraints: Vehicle and foot traffic to and from skimming sites should not disturb wildlife unreasonably.
- Environmental Effects: Minimal if surface disturbance by cleanup work force traffic is controlled.
- Waste Generation: Free-floating oil can be recycled. Emulsions formed during the process must be treated (broken) before recycling. Oil-contaminated waste from the treatment phase should be treated as wastewater.